

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (CURRENTLY AMENDED) An apparatus to prepare a biocompatible matrix from a matrix-forming fluid comprising

a chamber ~~[[to]]~~ containing a matrix-forming fluid, said chamber defined by at least a top planar rigid metal surface ~~of a heat-conductive material~~ and a bottom planar rigid metal surface ~~of a heat-conductive material~~, said top and bottom surfaces effective to symmetrically remove heat from the ~~said top surface~~ and ~~said bottom surface of said~~ matrix-forming fluid in preparation of the biocompatible matrix,

at least one discontinuous gasket having a uniform thickness positioned between said top and bottom surfaces to define a perimeter of said chamber, said gasket capable of containing said matrix-forming fluid within said perimeter, and

a plurality of fasteners to fasten said top surface with said bottom surface ~~said apparatus~~.
2. (ORIGINAL) The apparatus of claim 1 further comprising a container sized to contain a coolant fluid for immersion of said apparatus in said coolant fluid.
3. (ORIGINAL) The apparatus of claim 2 wherein said container is open.

4-32. (CANCELED)

33. (CURRENTLY AMENDED) An apparatus for casting a biologically compatible matrix, said apparatus comprising a metal chamber forming an open chamber with five joined surfaces and a separate sixth surface attachable to said open chamber to form a closed chamber containing a matrix-forming fluid for a biologically compatible matrix,

spacers to space the ~~first and second~~ top and bottom surfaces and thereby regulate a thickness of a matrix resulting from freezing of the matrix-forming fluid, the top and bottom surfaces defined by rigid metal sheets effective to symmetrically remove heat from said matrix-forming fluid, and

fasteners to effect a liquid-tight seal among at least the five joined surfaces.

34-39. (CANCELED)

40. (CURRENTLY AMENDED) An apparatus for controlled rate freezing of a matrix-forming fluid comprising a closed chamber defined by at least a top rigid metal surface ~~[[and]], a bottom rigid metal surface of a heat conductive material~~ and a discontinuous gasket, said chamber containing said fluid, said ~~heat conductive material~~ top and bottom surfaces symmetrically removing heat for controlled rate freezing of a matrix-forming fluid, said gasket capable of containing said matrix-forming fluid within a perimeter of said chamber.

41. (CANCELED)

42. (PREVIOUSLY PRESENTED) The apparatus of claim 40 wherein the gasket is of substantially uniform thickness separating said top and bottom surfaces.

43-46. (CANCELED)